

Rotational speed sensor device

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Abstract of FR2655735

The speed sensor device comprises an element forming a stator, provided with a winding consisting of a conductor in meanders on a printed circuit 1 consisting of a flexible thin-film element capable of matching the shape of the element forming the stator and fixed onto the latter preferably by adhesive bonding. The conducting circuit consists of a single conducting strand (4) sandwiched between two insulating films, at least one of which is perforated to define the connection zones (9). The active part (2) of the conducting circuit consists of a line (5) in meanders of a single conducting wire (4) wound at least once around itself in one and the same plane and in the same direction, each meander (5) comprising more than two parallel conducting strands (6). An increase in the signal provided when such a sensor element is placed in front of a multipole magnetised rotor driven in a rotational movement is thus obtained. The very small thickness and the flexibility of the sensor element (1) allow it to be fixed without difficulty onto any surface of the stator. It is in particular possible to integrate the assembly at least partially inside a sealing gasket of a roller bearing, especially for a motor vehicle wheel.

